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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,921	06/25/2003	John Erik Aasted Sorensen	45900-000806/US	1786
30593	7590	11/30/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			NGUYEN, PHUNG	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/602,921

Applicant(s)

SORENSEN, JOHN ERIK AASTE

Examiner

Phung T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/23/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims 7, 12, 25, and 30, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-3, 5-10, 12-17, 19-21, 23-28, and 30-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Howell (U.S. Pat. 6,457,364).

**Regarding claim 1:** Howell discloses ultrasound surveillance and break-in alarm which adapt to transmit a first signal by use of one of the at least one transmitter, transmit a second signal, succeeding the first signal, by use of one of the at least one transmitters, receive said first signal by use of one of the at least one receivers, receive said second signal by use of one of the at least one receivers, the system further comprising means for comparing the received first signal and the received second signal in order to detect a difference, if present, in said two

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signals, said difference being caused by a physical change present in the signal path between at least one of the transmitting transmitters and at least one of the receiving receivers, said change occurring between initiation of transmittal of the first signal and termination of the receipt of the second signal (fig. 1, col. 1, lines 27-57, and col. 2, lines 14-27).

**Regarding claim 2:** Howell inherently discloses wherein the first and second signals are transmitted from the same transmitter (col. 2, lines 60-64).

**Regarding claim 3:** Howell inherently discloses wherein the first and second signals are received by the same receiver (col. 2, lines 60-64).

**Regarding claim 5:** Howell discloses wherein the comparing means comprises processing means for processing the first and/or the second received signal(s) before comparing them, the comparison being performed on the basis of the processed signals (col. 2, lines 31-44).

**Regarding claim 6:** Howell discloses wherein the transmitter(s) is/are adapted to transmit the first signal during a pre-selected first time window and to transmit the second signal during a pre-selected second time window (col. 2, lines 40-49).

**Regarding claim 7:** Howell discloses wherein each of the signals transmitted is a carrier wave or a carrier wave like (col. 1, lines 51-55).

**Regarding claim 8:** Howell discloses wherein each of the signals transmitted is an impulse, or an impulse like signal (col. 2, lines 12-15).

**Regarding claim 9:** Howell discloses wherein the transmitter(s) is/are adapted to transmit an electromagnetic signal (col. 1, lines 27-30).

**Regarding claim 10:** Howell discloses wherein the transmitter(s) is/are adapted to transmit the first and the second signals as a first and a second set of packets of electromagnetic radiation, and wherein the receiver(s) is/are adapted to receive the first and second sets of packets (col. 2, lines 36-40).

**Regarding claim 12:** Howell discloses wherein the comparing means is adapted to compare the signal parameters, polarization, spectrum and/or delay of each packet, so as to identify differences between the parameters of the first and the second set of packets (col. 2, lines 16-20).

**Regarding claim 13:** Howell discloses wherein the transmitter(s) and the receiver(s) are components of a wireless network used for data transmission and/or positioning (col. 2, lines 60-64).

**Regarding claim 14:** Howell discloses wherein the wireless network is a wireless local area network used for data transmission and/or positioning (col. 2, lines 60-64).

**Regarding claim 15:** Howell discloses wherein at least one transmitter and at least one receiver are combined into a transceiver (col. 2, lines 60-64).

**Regarding claim 16:** Howell discloses wherein the comparing means is adapted to compare the detected difference to at least one known value, so as to identify the physical change causing the difference (col. 2, lines 14-22).

**Regarding claim 17:** Howell discloses collecting and storing previously obtained information relating to a plurality of compared signals, and means for comparing said information in order to allow for evaluation of a temporal development of the obtained information (col. 2, lines 31-45).

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**Regarding claim 19:** All the claimed subject matter is already discussed in respect to claim 1 above.

**Regarding claim 20:** Refer to claim 2 above.

**Regarding claim 21:** Refer to claim 3 above.

**Regarding claim 23:** Refer to claim 5 above.

**Regarding claim 24:** Refer to claim 6 above.

**Regarding claim 25:** Refer to claim 7 above.

**Regarding claim 26:** Refer to claim 8 above.

**Regarding claim 27:** Refer to claim 9 above.

**Regarding claim 28:** Refer to claim 10 above.

**Regarding claim 30:** Refer to claim 12 above.

**Regarding claim 31:** Refer to claim 13 above.

**Regarding claim 32:** Refer to claim 14 above.

**Regarding claim 33:** Refer to claim 15 above.

**Regarding claim 34:** Refer to claim 16 above.

**Regarding claim 35:** Refer to claim 17 above.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 4, 11, 18, 22, 29, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howell in view of Edwards et al. (U.S. Pat. 4,684,929).

**Regarding claim 4:** Howell discloses comparing the echo signal received in a first window period with the echo signal received in a second window period (col. 2, lines 40-45). Howell does not specifically disclose the claimed wherein the comparing means is adapted to detect a difference in signal strength between the first received signal and the second received signal. However, detecting a difference in signal strength between the first received signal and the second received signal is old and known in the art as taught by Edwards et al. (col. 2, lines 37-46, and col. 5, lines 26-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teaching of Edwards et al. in the system of Howell in order to provide a determination as to whether an intruder has entered the security zone.

**Regarding claim 11:** Refer to claim 4 above.

**Regarding claim 18:** Edwards et al. disclose determining the position of physical changes in the volume of interest (col. 5, lines 26-31).

**Regarding claim 22:** Refer to claim 4 above.

**Regarding claim 29:** Refer to claim 11 above.

**Regarding claim 36:** Refer to claim 18 above.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Bowling et al. [U.S. Pat. 4,155,078] disclose single wire intrusion detector system.

b. Gagnon [U.S. Pat. 6,288,640] discloses open transmission line intrusion detection system using frequency spectrum analysis.

c. Bodine et al. [U.S. Pat. 4,929,925] disclose alarm system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung T Nguyen whose telephone number is 571-272-2968. The examiner can normally be reached on 8:00am-5:30pm Mon thru. Friday, with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax numbers for the organization where this application or proceeding is assigned are 703-305-3988 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Phung Nguyen



Date: November 23, 2004